

Three new combinations in *Acilepis* D. Don (Asteraceae) from India

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Abstract

Critical studies with protologue and type specimens of *Vernonia anaimudica* B.V.Shetty & Vivek., *Vernonia pothigaiana* Chellad. & Gopalan and *Vernonia pulneyensis* Gamble shows the diagnostic features of *Acilepis* rather than *Vernonia* sensu stricto. Hence, they are transferred from *Vernonia* Schreb. to *Acilepis* D. Don.

Introduction

The distribution range and generic circumscription of *Vernonia* is greatly changed after the revision of the paleotropic species of tribe *Vernonieae* by Robinson (1999). After that Robinson and Skvarla (2006–2010) and Robinson et al. (2008) restored and erected many new genera under the tribe *Vernonieae*. Recent molecular and phylogenetic studies also supported the polyphyletic nature of *Vernonia* Schreb. sensu lato (Keeley et al. 2007; Keeley and Robinson 2009; Loeuille et al. 2015). However, most of these segregates are rather difficult to delimit. A few workers in India and Thailand already followed Robinson's treatment and transferred the known species of *Vernonia* to the respective segregated genera (Bunwong et al. 2014; Kumar 2014; Punekar and Vasudeva Rao 2006; Rasiya Beegam and Sibi 2012).

During the revision of *Vernonia* of Western Ghats, critical studies with protologue, type specimens coupled with fresh collection in the field unveiled that the following three species of *Vernonia* viz., *Vernonia anaimudica* B.V.Shetty & Vivek., *Vernonia pothigaiana* Chellad. & Gopalan and *Vernonia pulneyensis* Gamble belong to *Acilepis* because of the herbaceous habit, simple hairs on stems, separated heads, unequal and deeply separated cells of setulae of achenes. As there is no combination in *Acilepis* for these three species, I propose new combinations below.

Nomenclature

Acilepis anaimudica (B.V.Shetty & Vivek.) R.Kottaimuthu, **comb. nov.**

Basionym: *Vernonia anaimudica* B.V.Shetty & Vivek. *Bulletin of the Botanical Survey of India* 12(1–4): 266 (1972)

Type: INDIA: Kerala, Kottayam District, Rajamallay, Devicolam, 2 Feb 1970, Shetty & Vivekananthan 31786A (holo: CAL; iso: B-Z-MH!).

Distribution: India (Kerala) – Endemic.

Notes: *Acilepis anaimudica* resembles *A. heynei* (Bedd. ex Gamble) H. Rob. & Skvarla at first sight, but quiet distinct in having bullate leaves with rounded-acute base.

Acilepis pulneyensis (Gamble) R.Kottaimuthu, **comb. nov.**

Basionym: *Vernonia pulneyensis* Gamble, *Kew Bulletin* 1920: 341 (1920)

Type: INDIA: Pulney Hills, Banks of the Pambar river at Kodaikanal, 2300 m, Apr 1916, *P.F. Fyson* 4057 (Lectotype: K000814763, image!).

Distribution: India (Tamil Nadu) – Endemic.

Notes: Uniyal (1995) and Srivastava et al. (2015) opined that *Vernonia pulneyensis* Gamble has not been collected after type collection. However critical studies carried out by Murugan and Murthy (2010) revealed that the species was collected from the type locality and other localities, but erroneously identified as *Vernonia conyzoides* DC. Moreover, the species is often confused with *Vernonia peninsularis* C.B.Clarke ex Hook.f.

Acilepis pothigaiana (Chellad. & Gopalan) R.Kottaimuthu, **comb. nov.**

Basionym: *Vernonia pothigaiana* Chellad. & Gopalan, *Journal of Economic and Taxonomic Botany* 25(2): 271 (2001)

Type: INDIA: Tirunelveli, Pothigaimalai, c. 1868 m, 6 Feb 1989, *R. Gopalan* 88741 (holo: CAL; iso: MH!).

Distribution: India (Tamil Nadu) – Endemic.

Notes: *Acilepis pothigaiana* very closely resembles *A. fysonii* (Calder) H.Rob. & Skvarla, but differs in stem 10-ribbed; leaves elliptic-lanceolate, glandular, serrate; capitula lax, up to 12; phyllaries linear-lanceolate or oblong.

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